

Anti Mouse AGO2, Monoclonal Antibody (Clone No. : 2D4)

Argonaute2 (AGO2) was isolated as one of the main components of RISC (RNA-induced silencing complex). AGO2 captures siRNA and microRNA which are working as a guide molecule for interaction with target mRNAs in RNAi pathway. In this pathway, AGO2 catalyzes the nicking of target mRNAs and binding between RISC and target mRNAs.

This monoclonal antibody is not only used for western blot and immunohistochemistry(IHC), but also immunoprecipitation(IP) of mAGO2.

FEATURE

- 1) For IP, IHC, Western Blot
- 2) Cross reactivity with AGO2 protein of rat and hamster
- 3) For purification of RNA captured by RISC

INFORMATION

Concentration(protein) : Indicated on the label.

Formulation : 0.05% Sodium Azide, 10% Glycerol with 1 × TBS, pH7.4.

Clone No. : 2D4

Subclass : IgG1

Antigen : Synthesized peptide of N terminal mouse AGO2.

Storage : 2 ~ 10 °C in the dark. Avoid the freeze and thaw.

APPLICATION DATA

Application	Working Dilution
Western Blot	1 : 200 - 1 : 1,000
Immunoprecipitation	10 µg / IP
Immunohistochemistry	1 : 100 - 1 : 500

Organisms	Mouse	Hamster	Rat	Human
Cell	P388D1 NIH-3T3	CHO	SCC-131	NCI-H460
Western Blot				×
Immunoprecipitation				×
Immunohistochemistry	(NIH-3T3)	NT	NT	×
microRNA Purification	(P388D1)			×

NT : Non Tested.

Immunoprecipitation of mAGO2 protein from P388D1 cell line

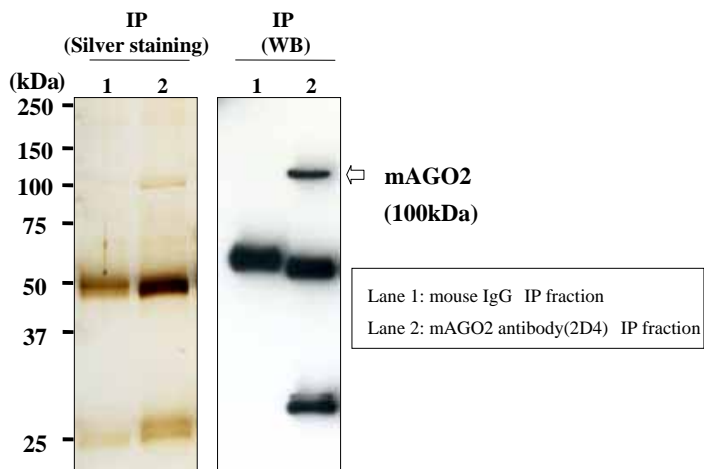


Figure 1. Immunoprecipitation of mAGO2 protein from P388D1 cell line by using 20 µL 10% Protein G slurry immobilized with 5 µg this antibody (2D4). The band of endogenous mAGO2 protein was detected in approximately 100kDa by using silver staining and western blot. The 1/1,000 diluted this antibody was used as the 1st antibody for western blot. Cell number was 5×10^6 cells.

Immunohistochemistry of mAGO2 protein of NIH-3T3 cell line

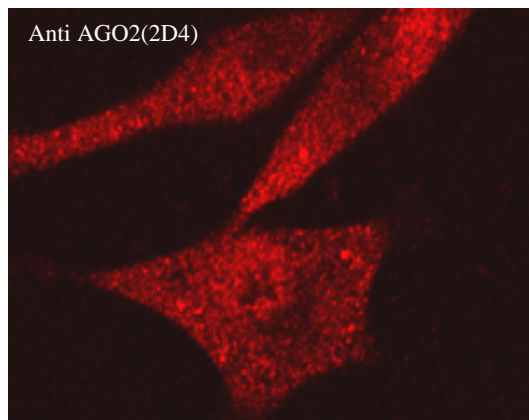
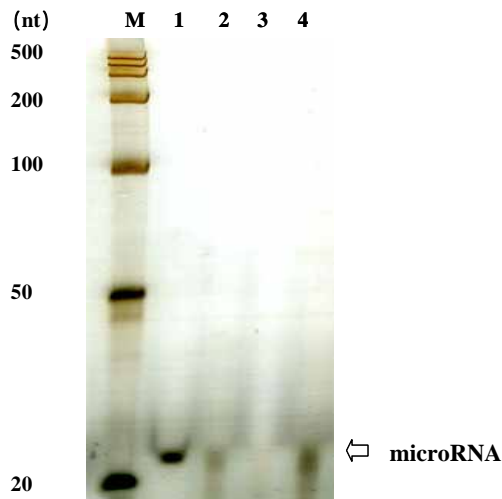


Figure 2. Immunohistochemistry of mAGO2 protein of NIH-3T3 cell line by using 1/300 diluted this antibody. mAGO2 protein was localized in cytoplasm.

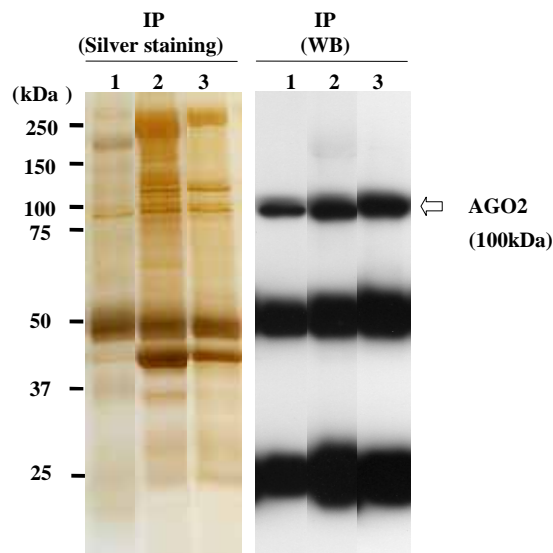
microRNA purification



Lane M : Molecular weight marker
 Lane 1 : Single strand RNA (22nt) 1ng
 Lane 2 : hAGO2 antibody (4G8) NCI-H460 IP fraction
 Lane 3 : mouse IgG P388D1 IP fraction
 Lane 4 : mAGO2 antibody (2D4) P388D1 IP fraction

Figure 3. Immunoprecipitation of mAGO2 protein from P388D1 cell line by using 20 μ L 10% Protein G slurry immobilized with 5 μ g this antibody. The purified microRNA fraction from P388D1 cell lines were specifically detected by Urea-PAGE. Cell number was 5×10^6 cells.

Immunoprecipitation of AGO2 from other rodent cell lines.



Lane 1: NIH-3T3 (Mouse) IP fraction
 Lane 2: SCC-131 (Rat) IP fraction
 Lane 3: CHO (Hamster) IP fraction

Figure 4. Immunoprecipitation of AGO2 protein from NIH-3T3(Mouse), SCC-131(Rat) and CHO(Hamster) cell line by using 20 μ L 10% Protein G slurry immobilized with 5 μ g this antibody (2D4). The band of endogenous mAGO2 protein was detected in approximately 100kDa by using silver staining and western blot. The 1/1,000 diluted this antibody was used as the 1st antibody for western blot. Cell number was 5×10^6 cells.

Code No.	Description	Package Size
NEW !! 014-22023	Anti Mouse AGO2, Monoclonal Antibody	50 μ L
NEW !! 018-22021		100 μ L
NEW !! 011-22033	Anti Human AGO2, Monoclonal Antibody	50 μ L
NEW !! 015-22031		100 μ L
292-66701	microRNA Isolation kit, Human Ago2	10 reactions
290-66501	microRNA Cloning kit Wako	8 reactions
298-65103	Single Strand DNA Ligase, thermostable, recombinant, Solution	200 units
292-65101		500 units

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